



State of Utah

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

Department of Administrative Services

RICHARD K. ELLIS
Executive Director

Division of Facilities Construction and Management

F. KEITH STEPAN
Director

ADDENDUM #1

Date: 28 September 2006

To: Contractors

From: Brent Lloyd, Project Manager, DFCM

Reference: UNG – Lehi Armory Window Replacement

DFCM Project #: 06141470

Subject: **Addendum No. 1**

Pages:

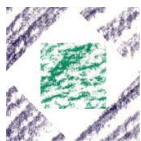
Addendum	1 page
<u>Architectural Addendum</u>	<u>14 pages</u>
Total Pages	15 pages

Note: This Addendum shall be included as part of the Contract Documents. Items in this Addendum apply to all drawings and specification sections whether referenced or not involving the portion of the work added, deleted, modified, or otherwise addressed in the Addendum. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

1.1 Schedule changes: There are no schedule changes per this Addendum.

1.2 Reference the attached document provided by HFS Architects modifying and clarifying the original specifications and drawings.

End of Addendum

**HFSARCHITECTS**

1484 South State Street
Salt Lake City, Utah 84115
801-596-0691 • Fax: 596-0693 • www.hfsa.com

Addendum No. 01

Project:	Lehi Armory Window Replacement	Date:	28 September 2006
Address:	348 East Main Street	Project No.:	0621.01
City, State:	Lehi, Utah 84043	Owner No.:	06141470
Owner:	DFCM	Agency:	Utah National Guard

To all Bidders of Record:

This addendum forms a part of the contract documents and modifies the original specifications and drawings as noted below. Items of general information are included without reference to the plans and specifications. Revisions to the specifications are referenced by page number and paragraph heading on that page. Revisions to the drawings are reference by the drawing number. Unless otherwise stated, any changes herein offset only the specific drawings, words, or paragraphs mentioned, and the balance of the drawings and specifications remain in full force. Acknowledge receipt of this addendum in the space provided on the Bid form. Failure to do so will subject the Bidder to disqualification.

Item No.	Section or Sheet No.	Description
General Items:		
1 -1	Clarification	Remove all existing security bars and A/C supports and framing, patch holes. Attached photographs (Figures 1-9) show all the windows where this work is required.
Specifications Items:		
1 -2	08410	Replace specification section 08410 Aluminum Windows with the attached specification section 08411 Aluminum Entrances and Storefronts.
Drawing Items:		
1 -3	AD201	D2 East Elevation: The drawing is missing one 3'-0"x3'-0" wood-framed window on the south end. Completely remove existing window glazing and framing (see attached photograph, Figure 10).
1 -4	AE201	D2 East Elevation: Add new 3'-0"x3'-0" window in the same location as referenced above. See attached details C2/AE501, C3/AE501, and D2/AE501.
1 -5	AE501	Add the attached window details C2/AE501, C3/AE501, and D2/AE501.
1 -6	AE501	D4 Door Schedule: Revise doors 101 and 102 as double doors, 3'-5" wide by 7'-2" high.
Prior Approvals:		
1 -7		None.
Attachments:		
1 -8	8 pages	Specification section 08411 Aluminum Entrances and Storefronts.



Figure 1: North end on the west side, remove security bars and A/C supports and framing, patch holes.



Figure 4: East side of entry on the north side, remove A/C supports and framing, patch holes.



Figure 2: South end on the west side, remove security bars and patch holes.



Figure 6: North end on the east side, remove A/C supports and framing, patch holes.



Figure 3: North end on the west side of entry, remove A/C supports and framing, patch holes.



Figure 5: North end on the east side, remove A/C supports and framing, patch holes



Figure 7: Center portion on the east side, remove A/C supports and framing, patch holes.



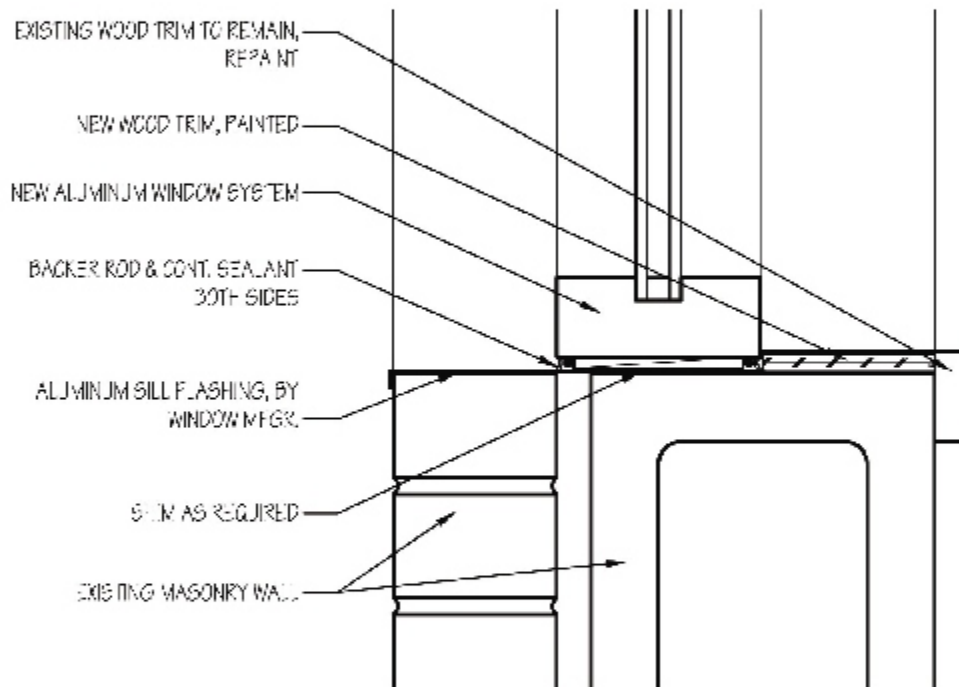
Figure 10: South end on the east side, remove 3'-0"x3'-0" window and frame.



Figure 8: South end on the east side, remove plywood and A/C supports and framing, patch holes.



Figure 9: South end on the east side, remove A/C supports and framing, patch holes.



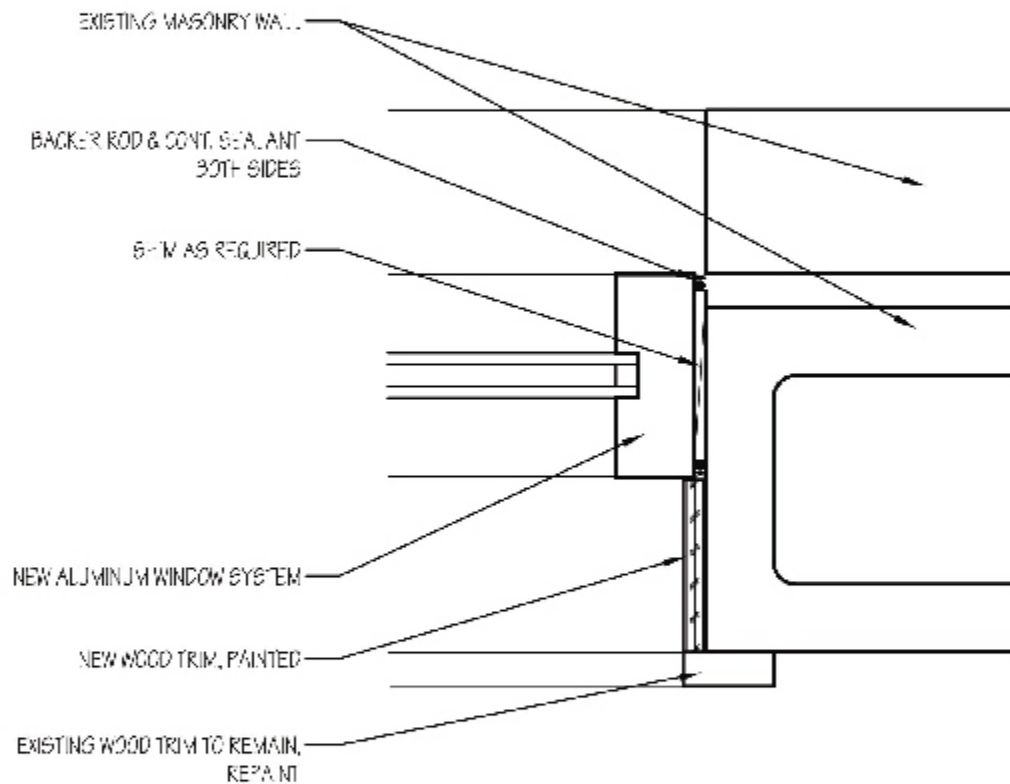
HFSArchitects

C2/AE501 WINDOW SILL DETAIL

SCALE 3"=1'-0"
28 SEPTEMBER 2006
CLIENT PROJ No 0614-470
HFSA PROJ No 0621.01

ARCHITECTURE
INTERIORS
PLANNING

LEHI ARMORY WINDOW REPLACEMENT ADDENDUM 01



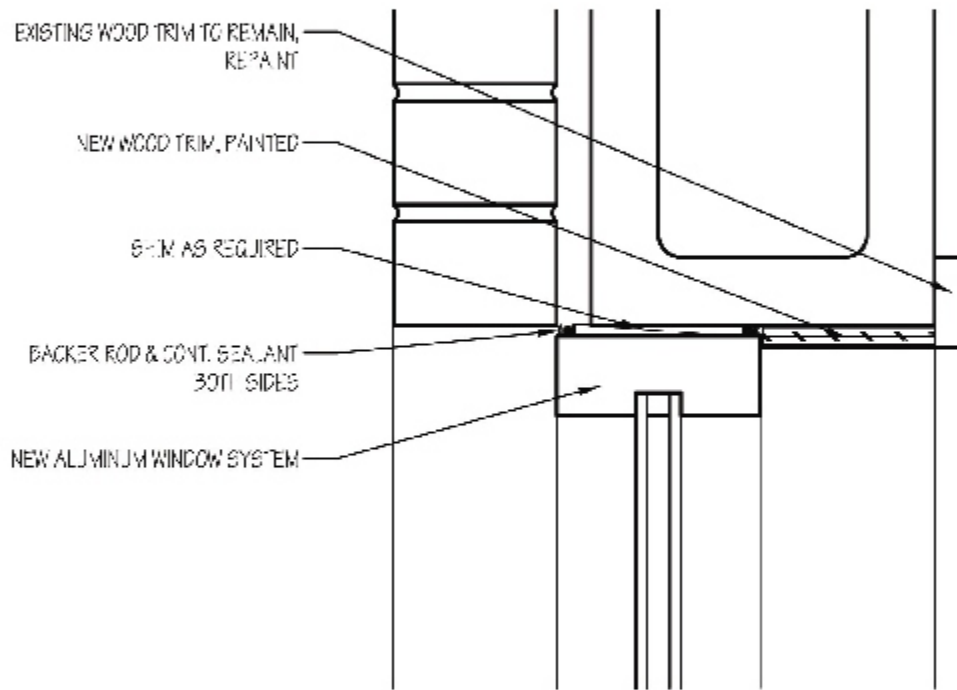
HFS*Architects*

C3/AE501 WINDOW JAMB DETAIL

SCALE 3"=1'-0"
28 SEPTEMBER 2006
CLIENT PROJ No 0614-470
HFSA PROJ No 0621.01

ARCHITECTURE
INTERIORS
PLANNING

LEHI ARMORY WINDOW REPLACEMENT ADDENDUM 01



HFS Architects

D2/AE501 WINDOW HEAD DETAIL

LEHI ARMORY WINDOW REPLACEMENT ADDENDUM 01

SCALE 3"=1'-0"
28 SEPTEMBER 2006
CLIENT PROJ No 0614-470
HFS PROJ No 0621.01

SECTION 08411 - ALUMINUM ENTRANCES AND STOREFRONTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Exterior aluminum doors and hardware and storefront type aluminum window systems.
 - 2. Aluminum sill flashing associated with aluminum windows.
 - 3. Sealants installed as part of aluminum entrance and storefront systems..
- B. Related sections include the following:
 - 1. Division 8 Section "Glazing."
 - 2. Division 8 Section "Security Glazing" (For Alternate #2)

1.3 SYSTEM DESCRIPTION

- A. General: Provide aluminum entrance and storefront systems capable of withstanding loads and thermal and structural movement requirements indicated without failure, based on testing manufacturer's standard units in assemblies similar to those indicated for this Project. Failure includes the following:
 - 1. Air infiltration and water penetration exceeding specified limits.
 - 2. Framing members transferring stresses, including those caused by thermal and structural movement, to glazing units.
- B. Glazing: Physically and thermally isolate glazing from framing members.
- C. Thermally Broken Construction: Provide systems that isolate aluminum exposed to exterior from aluminum exposed to interior with a material of low thermal conductance.
- D. Air Infiltration: Provide entrance and storefront systems with permanent resistance to air leakage through fixed glazing and frame areas of not more than **0.06 cfm/sq. ft.** of fixed wall area when tested according to ASTM E 283 at a static-air-pressure difference of **1.57 lbf/sq. ft.**
- E. Water Penetration: Provide entrance and storefront systems that do not evidence water leakage through fixed glazing and frame areas when tested according to ASTM E 331 at minimum differential pressure of 20 percent of inward-acting wind-load design pressure as defined by ASCE 7, "Minimum Design Loads

for Buildings and Other Structures," but not less than **6.24 lbf/sq. ft.**. Water leakage is defined as follows:

1. Uncontrolled water infiltrating systems or appearing on systems' normally exposed interior surfaces from sources other than condensation. Water controlled by flashing and gutters that is drained back to the exterior and cannot damage adjacent materials or finishes is not water leakage.

1.4 SUBMITTALS

- A. Product Data: For each product specified. Include details of construction relative to materials, dimensions of individual components, profiles, and finishes.
- B. Shop Drawings: For entrance and storefront systems. Show details of fabrication and installation, including plans, elevations, sections, details of components, provisions for expansion and contraction, and attachments to other work.
- C. Installer Certificates: Signed by manufacturer certifying that installers comply with specified requirements.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Engage an experienced installer who has specialized in installing entrance and storefront systems similar to those required for this Project and who is acceptable to manufacturer.
- B. Source Limitations: Obtain each type of entrance and storefront system through one source from a single manufacturer.
- C. Product Options: Drawings indicate size, profiles, and dimensional requirements of entrance and storefront systems and are based on the specific systems indicated. Other manufacturers' systems with equal performance characteristics may be considered. Refer to Division 1 Section "Substitutions."
 1. Do not modify intended aesthetic effect, as judged solely by Architect, except with Architect's approval and only to the extent needed to comply with performance requirements. Where modifications are proposed, submit comprehensive explanatory data to Architect for review.
- D. Welding Standards: Comply with applicable provisions of AWS D1.2, "Structural Welding Code—Aluminum."

1.6 PROJECT CONDITIONS

- A. Field Measurements: Verify dimensions by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
 1. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish dimensions and proceed with fabricating systems without field measurements. Coordinate construction to ensure actual dimensions correspond to established dimensions.

1.7 WARRANTY

- A. General Warranty: The special warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.
- B. Special Warranty: Submit a written warranty executed by the manufacturer agreeing to repair or replace components of entrance and storefront systems that fail in materials or workmanship within the specified warranty period. Failures include, but are not limited to, the following:
 - 1. Structural failures including, but not limited to, excessive deflection.
 - 2. Adhesive sealant failures.
 - 3. Cohesive sealant failures.
 - 4. Failure of system to meet performance requirements.
 - 5. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
 - 6. Failure of operating components to function normally.
 - 7. Water leakage through fixed glazing and frame areas.
- C. Warranty Period: 2 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Arch Amarlite.
 - 2. EFCO Corporation.
 - 3. International Aluminum Corporation; U.S. Aluminum.
 - 4. Kawneer Company, Inc.
 - 5. Tubelite Architectural Systems.

2.2 MATERIALS

- A. Aluminum: Alloy and temper recommended by manufacturer for type of use and finish indicated, complying with the requirements of standards indicated below.
 - 1. Sheet and Plate: **ASTM B 209**.
 - 2. Extruded Bars, Rods, Shapes, and Tubes: **ASTM B 221**.
 - 3. Extruded Structural Pipe and Tubes: **ASTM B 429**.
 - 4. Bars, Rods, and Wire: **ASTM B 211**.
 - 5. Welding Rods and Bare Electrodes: **AWS A5.10**.

- B. Steel Reinforcement: Complying with **ASTM A 36** for structural shapes, plates, and bars; ASTM A 611 for cold-rolled sheet and strip; or **ASTM A 570** for hot-rolled sheet and strip.
- C. Glazing as specified in Division 8 Section "Glazing."
- D. Glazing Gaskets: Manufacturer's standard pressure-glazing system of black, resilient glazing gaskets, setting blocks, and shims or spacers, fabricated from an elastomer of type and in hardness recommended by system and gasket manufacturer to comply with system performance requirements. Provide gasket assemblies that have corners sealed with sealant recommended by gasket manufacturer.
- E. Spacers, Setting Blocks, Gaskets, and Bond Breakers: Manufacturer's standard permanent, nonmigrating types in hardness recommended by manufacturer, compatible with sealants, and suitable for system performance requirements.
- F. Framing system gaskets, sealants, and joint fillers as recommended by manufacturer for joint type.
- G. Bituminous Paint: Cold-applied asphalt-mastic paint complying with SSPC-Paint 12 requirements, except containing no asbestos, formulated for **30-mil** thickness per coat.
- H. Sealant and backer rods. Installers standard silicone or polyurethane sealant- color to match frames. Backer rods to be closed cell only.

2.3 COMPONENTS

- A. Doors: Provide manufacturer's standard **1-3/4-inch-** thick glazed doors with minimum **0.125-inch-** thick, extruded tubular rail and stile members. Mechanically fasten corners with reinforcing brackets that are deep penetration and fillet welded or that incorporate concealed tie-rods.
 - 1. Glazing Stops and Gaskets: Provide manufacturer's square snap-on extruded-aluminum glazing stops and preformed gaskets.
 - 2. Stile Design: As indicated on Drawings.
- B. Brackets and Reinforcements: Provide manufacturer's standard brackets and reinforcements that are compatible with adjacent materials. Provide nonstaining, nonferrous shims for aligning system components.
- C. Fasteners and Accessories: Manufacturer's standard corrosion-resistant, nonstaining, nonbleeding fasteners and accessories compatible with adjacent materials.
 - 1. Reinforce members as required to retain fastener threads.
 - 2. Do not use exposed fasteners, except for hardware application. For hardware application, use countersunk Phillips flat-head machine screws finished to match framing members or hardware being fastened, unless otherwise indicated.
- D. Concrete and Masonry Inserts: Hot-dip galvanized cast-iron, malleable-iron, or steel inserts complying with ASTM A 123 or ASTM A 153 requirements.
- E. Concealed Flashing: Manufacturer's standard corrosion-resistant, nonstaining, nonbleeding flashing, compatible with adjacent materials, and of type recommended by manufacturer.

F. Weather Stripping: Manufacturer's standard replaceable weather stripping as follows:

1. Compression Weather Stripping: Molded neoprene complying with ASTM D 2000 requirements or molded PVC complying with ASTM D 2287 requirements.
2. Sliding Weather Stripping: Wool, polypropylene, or nylon woven pile with nylon-fabric or aluminum-strip backing complying with AAMA 701 requirements.

2.4 DOORS

A. Doors: Manufacturer's semi-custom glazed doors, for manual swing operation.

1. Door Construction: **1-3/4-inch** overall thickness, with minimum **0.125-inch-** thick, extruded-aluminum tubular rail and stile members. Mechanically fasten corners with reinforcing brackets that are deep penetration and fillet welded or that incorporate concealed tie rods.
2. Door Design: Medium stile; **3-1/2-inch** nominal width rails, with a wide stile **5-inch** nominal height head and a 6" cross rail behind the exit devices and a 12" bottom rail.
3. Glazing Stops and Gaskets: Beveled, snap-on, extruded-aluminum stops and preformed gaskets.
 - a. Provide nonremovable glazing stops on outside of door.

2.5 HARDWARE

- A. General: Provide hardware for each door to comply with requirements of Section "Door Hardware," hardware set numbers indicated in door symbol, and in the following schedule of hardware sets.
1. Hardware sets indicate quantity, item, manufacturer and product designation, size, and finish or color, as applicable.

QTY.	ITEM	MFG	MODEL	STYLE/SIZE	FINISH
Outer Alum Pairs					
2 Ea	Cont. Hinges	Roton	780-112HD	Cont	Dk. Bronze
1 Ea	Exit Device	Von Duprin	CD98DT x 990DT	less strike	26D
1 Ea	Exit Device	Von Duprin	CD98NL x 990NL-R/V	less strike	26D
2 Ea	Cylinders*	Best	1E-72		26D
2 Ea	Cylinders*	Best	1E-74		26D
1 Ea	Mullion	Von Duprin	5754		Dk. Bronze
2 Ea	Closer	LCN	4040 w/ 61 spacer	Spring HCUSH	DKBRZ
2 Ea	Kick Plate	Quality	No. 48	10"	32D
1 Set	Weatherstrip	By Door Mfg.			
1 Ea	Threshold	By Door Mfg.			Mill

* Coordinate keying with the National Guard- Provide 5 keys per cylinder- Stamp "Do Not Duplicate"

2.6 FABRICATION

- A. General: Fabricate components that, when assembled, will have accurately fitted joints with ends coped or mitered to produce hairline joints free of burrs and distortion. After fabrication, clearly mark components to identify their locations in Project according to Shop Drawings.
 - 1. Profile to Match "451 T", Kawneer Company, Inc.
- B. Forming: Form shapes with sharp profiles should be straight and free of defects or deformations, before finishing.
- C. Prepare components to receive concealed fasteners, anchors and connection devices.
- D. Fabricate components to drain water past joints, condensation and moisture occurring within the system should migrate within the system to the exterior.
- E. Welding: Weld components to comply with referenced AWS standard. Weld before finishing components to greatest extent possible. Weld in concealed locations to greatest extent possible to minimize distortion or discoloration of finish. Remove weld spatter and welding oxides from exposed surfaces by descaling or grinding.
- F. Glazing Channels: Provide minimum clearances for thickness and type of glass indicated according to FGMA's "Glazing Manual."
- G. Metal Protection: Where aluminum will contact dissimilar metals, protect against galvanic action by painting contact surfaces with primer or by applying sealant or tape recommended by manufacturer for this purpose. Where aluminum will contact concrete or masonry, protect against corrosion by painting contact surfaces with bituminous paint.
- H. Storefront: Fabricate framing in profiles indicated for flush glazing (without projecting stops). Provide subframes and reinforcing of types indicated or, if not indicated, as required for a complete system. Factory assemble components to greatest extent possible. Disassemble components only as necessary for shipment and installation.
- I. Entrances: Fabricate door framing in profiles indicated. Reinforce as required to support imposed loads. Factory assemble door and frame units and factory install hardware to greatest extent possible. Reinforce door and frame units as required for installing hardware indicated. Cut, drill, and tap for factory-installed hardware before finishing components.
 - 1. Exterior Doors: Provide compression weather stripping at fixed stops. At other locations, provide sliding weather stripping retained in adjustable strip mortised into door edge.

2.7 ALUMINUM FINISHES

- A. General: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations relative to applying and designating finishes.

- B. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.
- C. Finish designations prefixed by AA conform to the system established by the Aluminum Association for designating aluminum finishes.
- D. Class I, Color Anodic Finish: AA-M12C22A42/A44 (Mechanical Finish: nonspecular as fabricated; Chemical Finish: etched, medium matte; Anodic Coating: Architectural Class I, integrally colored or electrolytically deposited color coating 0.018 mm or thicker) complying with AAMA 611.

1.Color: Dark bronze.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of entrance and storefront systems. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. General: Comply with manufacturer's written instructions for protecting, handling, and installing entrance and storefront systems. Do not install damaged components. Fit frame joints to produce hairline joints free of burrs and distortion. Rigidly secure nonmovement joints. Seal joints watertight.
- B. Metal Protection: Where aluminum will contact dissimilar metals, protect against galvanic action by painting contact surfaces with primer or by applying sealant or tape recommended by manufacturer for this purpose. Where aluminum will contact concrete or masonry, protect against corrosion by painting contact surfaces with bituminous paint.
- C. Install components to drain water past joints, condensation and moisture occurring within the system should migrate within the system to the exterior.
- D. Set continuous sill members and flashing in a full sealant bed to provide weathertight construction, unless otherwise indicated. Comply with requirements of Division 7 Section "Joint Sealants."
- E. Install framing components plumb and true in alignment with established lines and grades without warp or rack of framing members.

- F. Install entrances plumb and true in alignment with established lines and grades without warp or rack. Lubricate operating hardware and other moving parts according to hardware manufacturers' written instructions.
- G. Install glazing to comply with requirements of Division 8 Section "Glazing," unless otherwise indicated.
- H. Install perimeter sealant to comply with requirements of Division 7 Section "Joint Sealants," unless otherwise indicated.
- I. Erection Tolerances: Install entrance and storefront systems to comply with the following maximum tolerances:
 - 1. Variation from Plane: Limit variation from plane or location shown to **1/8 inch in 12 feet; 1/4 inch** over total length.
 - 2. Alignment: Where surfaces abut in line, limit offset from true alignment to **1/16 inch**. Where surfaces meet at corners, limit offset from true alignment to **1/32 inch**.
 - 3. Diagonal Measurements: Limit difference between diagonal measurements to **1/8 inch**.

3.2 ADJUSTING AND CLEANING

- A. Adjust doors and hardware to provide tight fit at contact points and weather stripping, smooth operation, and weathertight closure. Remove excess sealant and glazing compounds, and dirt from surfaces.

3.3 PROTECTION

- A. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, that ensure entrance and storefront systems are without damage or deterioration at the time of Substantial Completion.

END OF SECTION 08410